ABSTRACT

An easy and cost-effective method of generating high fidelity simulation service loads. This invention, however, provides a simple but theoretically sound approach to conducting an accelerated simulation test, while obtaining a reasonable acceleration rate for the test. By developing a service load history database; Combining multiple time series models; Adjusting the change of each time series model creating an accelerated service load model; regenerating a random vibration load data; and Feeding the load data to drive an actuator for a high fidelity random vibration simulation test.